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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/932,866	08/17/2001	Gerard Chauvel	TI-31347	6569

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EXAMINER

KIM, HONG CHONG

ART UNIT	PAPER NUMBER
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2186

DATE MAILED: 03/24/2003

4

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/932,866

Applicant(s)

CHAUVEL ET AL.

Examiner

Hong C Kim

Art Unit

2186

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 August 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Detailed Action

1. Claims 1-11 are presented for examination. This office action is in response to the amendment filed on 8/17/01.

2. Applicants are reminded of the duty to disclose information under 37 CFR 1.56.

Priority

3. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in EPO on 8/21/00 and 3/29/01. It is noted, however, that applicant has not filed a certified copy of the EP 00402331.3 and EP 01400818.9 application as required by 35 U.S.C. 119(b).

4. Applicants are requested to update the status of the related U.S. patent application referred to on page 1 in the specification, accordingly (e.g., U.S. Patent Application Serial No. #####,### filed Sept. 07, 1990, now abandoned; ..., now U.S. Patent #,###,### issued Jan. 01, 1994; or This application is a continuation of Serial Number #####,###, filed on December 01, 1990, now abandoned; ...etc.). Also applicants are requested to include the status of the related U.S. applications or patents in the CROSS-REFERENCE TO RELATED APPLICATIONS section and in any other corresponding area in the specification.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-10 are rejected under 35 U.S.C. 102(e) as being anticipated by Lim US Patent No. 6,430,640 or 35 U.S.C. 102(b) as being anticipated by Suzuki et al. (Suzuki) US Patent No. 4,400,771.

As to claim 1, Lim discloses the invention as claimed. Lim discloses a method for prioritizing access to a shared resource in a digital having a plurality of devices vying for access to the shared resource (abstract), comprising the steps of: initiating an access request by each of the plurality of devices (col. 4 lines 1-5); providing two priority values (col. 4 lines 9-10) along with each access request from each device; and arbitrating for access to the shared device by using the higher of two priority values from each device (abstract and col. 13 lines 1-12).

Alternatively, Suzuki discloses a method for prioritizing access to a shared resource in a digital having a plurality of devices vying for access to the shared resource (abstract), comprising

the steps of: initiating an access request by each of the plurality of devices (col. 4 lines 21-23); providing two priority values along with each access request from each device (abstract and col. 4 lines 32-35); and arbitrating for access to the shared device by using the higher of two priority values from each device (abstract and col. 4 lines 32-35).

As to claim 2, Lim further discloses wherein the step of providing two priority values comprises the steps of; establishing a software priority state associated with a program module; executing an instruction from the program module; and providing an access priority value with the access request that is responsive to the software priority state of the program module (col. 13 lines 39-42 and col. 15 lines 8-29, arbitration units 404 can be implemented using hardware, software, or a combination thereof and priorities can be assigned and updated on the fly read on this limitation).

Alternatively, Suzuki further discloses wherein the step of providing two priority values comprises the steps of; establishing a software priority state associated with a program module; executing an instruction from the program module; and providing an access priority value with the access request that is responsive to the software priority state of the program module (col. 5 lines 17-22).

As to claim 3, Lim discloses the invention as claimed. Lim discloses the step of providing an address space priority value with each request in repose to an address specified by

each access request (col. 2 lines 34-46).

Alternatively, Suzuki discloses the step of providing an address space priority value with each request in repose to an address specified by each access request (col. 5 lines 38-42).

As to claim 4, Lim discloses the invention as claimed. Lim discloses the step of assigning, storing, and querying address space priority values to pages of memory (col. 2 lines 34-46).

Alternatively, Suzuki discloses the step of assigning, storing, and querying address space priority values to pages of memory (col. 5 lines 38-42).

As to claim 5, Lim discloses the invention as claimed. Lim discloses the step of selecting a higher priority value and comparing the values (abstract and col. 13 lines 1-12).

Alternatively, Suzuki discloses the step of selecting a higher priority value and comparing the values (abstract and col. 4 lines 32-35).

As to claim 6, Lim discloses the invention as claimed. Lim discloses the step of wherein another device vying for access to the shared resource provides one or the other but not both of the two priority values (abstract and col. 13 lines 1-12).

Alternatively, Suzuki discloses the step of wherein another device vying for access to the shared resource provides one or the other but not both of the two priority values (abstract and col.

4 lines 24-35).

As to claim 7, Lim discloses the invention as claimed. Lim discloses a digital system (abstract) comprising: a shared resource (abstract); a plurality of devices (col. 4 lines 1-5) connected to access the shared resource, wherein each device has a request output and circuitry for providing two separate variable priority values (col. 4 lines 1-10); arbitration circuitry (abstract and col. 13 lines 1-12).

Alternatively, Suzuki discloses a digital system (abstract) comprising: a shared resource (abstract); a plurality of devices (col. 4 lines 21-23) connected to access the shared resource, wherein each device has a request output and circuitry for providing two separate variable priority values (abstract and col. 4 lines 32-35); arbitration circuitry (abstract and col. 4 lines 32-35).

As to claim 8, Lim discloses the invention as claimed. Lim discloses a digital system (abstract) comprising: a shared resource (abstract); a plurality of devices (col. 4 lines 1-5) connected to access the shared resource, wherein each device has an access priority register and a request output (col. 4 lines 1-10), wherein the access priority register of each device is loaded with a value by software executing on the respective device (col. 13 lines 39-42 and col. 15- 8-29, arbitration units 404 can be implemented using hardware, software, or a combination thereof and priorities can be assigned and updated on the fly read on this limitation); a plurality of

memory management units (Fig. 11 and col. 2 lines 34-46); arbitration circuitry (abstract and col. 13 lines 1-12).

Alternatively, Suzuki discloses a digital system (abstract) comprising: a shared resource (abstract); a plurality of devices (col. 4 lines 21-23) connected to access the shared resource, wherein each device has an access priority register and a request output (abstract and col. 4 lines 32-35), wherein the access priority register of each device is loaded with a value by software executing on the respective device (col. 5 lines 17-22); a plurality of memory management units (Fig. 5D and col. 5 lines 38-42); arbitration circuitry (abstract and col. 4 lines 32-35).

As to claim 9, Lim discloses the invention as claimed. Lim discloses a portion of the access priority register is set responsive to an interrupt received by the respective device (col. 13 lines 39-42 and col. 15 lines 8-29, arbitration units 404 can be implemented using hardware, software, or a combination thereof and priorities can be assigned and updated on the fly read on this limitation).

Alternatively, Suzuki discloses a portion of the access priority register is set responsive to an interrupt received by the respective device (col. 5 lines 17-22).

As to claim 10, Lim discloses the invention as claimed. Lim discloses only a portion of the access priority register can be modified by the application software being executed on the respective device (col. 13 lines 39-42 and col. 15 lines 8-29, arbitration units 404 can be

implemented using hardware, software, or a combination thereof and priorities can be assigned and updated on the fly read on this limitation).

Alternatively, Suzuki discloses only a portion of the access priority register can be modified by the application software being executed on the respective device (col. 5 lines 17-22).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) a patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lim US Patent No. 6,430,640 or Suzuki et al. (Suzuki) US Patent No. 4,400,771 in view of Woolsey et al. (Woolsey) US Patent No. 6,029,000.

As to claim 11, Lim and Suzuki disclose the invention as claimed in the above. However, neither Lim nor Suzuki discloses the digital system being a cellular telephone and further comprises; an integrated keyboard connected to the CPU, a display, radio frequency circuitry, and an aerial connected to the RF circuitry.

Woolsey discloses the digital system being a cellular telephone (Fig. 1) and further comprises; an integrated keyboard (Fig. 1 Ref. 36) connected to the CPU, a display, radio frequency circuitry, and an aerial connected to the RF circuitry (col. 2 lines 29-44) for the

purpose of providing a portability of the system.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the digital system being a cellular telephone and further comprises; an integrated keyboard connected to the CPU, a display, radio frequency circuitry, and an aerial connected to the RF circuitry as shown in Woolsey into the combined invention of Lim and Suzuki for the advantages stated above.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See attached PTO-892.

10. a shortened statutory period for response to this action is set to expire 3 (three) months and 0 (zero) days from the mail date of this letter. Failure to respond within the period for response will result in **ABANDONMENT** of the application (see 35 USC 133, MPEP 710.02, 710.02(b)).

11. When responding to the office action, Applicant is advised to clearly point out the patentable novelty which he or she thinks the claims present in view of the state of the art disclosed by the references cited or the objections made. He or she must also show how the amendments avoid such references or objections. See 37 C.F.R. § 1.111(c).

12. When responding to the office action, Applicants are advised to provide the examiner with the line numbers and page numbers in the application and/or references cited to assist examiner to locate the appropriate paragraphs.

13. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Hong Kim whose telephone number is (703) 305-3835. The Examiner can normally be reached on the weekdays from 8:30 AM to 5:00 PM.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Matt Kim, can be reached on (703) 305-3821.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-3900.

14. **Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to TC-2100:

After-Final (703) 746-7238

Official (703) 746-7239 (for formal communications intended for entry)

Non-Official/Draft (703) 746-7240 (for informal or draft communications, please label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

Application/Control Number: 09/932,866
Art Unit: 2186

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Paper No.4

HK
Primary Patent Examiner
March 17, 2003

A handwritten signature in black ink, appearing to be 'H. Kim', written over the text 'Primary Patent Examiner'.